



US EPA RECORDS CENTER REGION 5



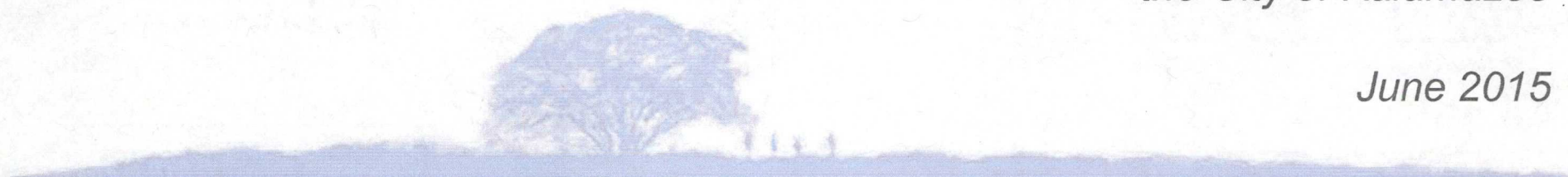
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Allied Landfill Site Reuse Suitability Analysis

Kalamazoo, Michigan

*Prepared for EPA Region 5, MDEQ and
the City of Kalamazoo*

June 2015



Purpose

Support the City of Kalamazoo, MDEQ, EPA Region 5 and the community in evaluating reuse suitability of proposed remedial alternatives for the Allied Landfill site.

Overview

- Site Background
- Reuse Goals
- Reuse Suitability
- Next Steps

Site Background

- The 2013 Allied Landfill Feasibility Study identifies a potential consolidation and capping remedy for the site.
- EPA, MDEQ and the City of Kalamazoo have been evaluating alternative consolidating and capping options to create larger areas suitable for commercial, light industrial and recreational reuse.
- Based on these discussions, EPA plans to add a new remedial alternative to the Feasibility Study, then issue a proposed plan for the preferred remedial alternative.



Reuse Goals

Reuse Goals

- **Protective** – The site's remedy should be protective of human health and the environment, and support future land uses that allow public access.
- **Productive** – The site's reuse should include uses that are productive for the local economy and environment.
- **Accessible** – Ensure that the site is accessible to the community, considering both vehicular and pedestrian access.
- **Connected** – Pursue both physical and economic connections between future uses at the site building on emerging enterprises in the local economy.

Connections and Access

Community members identified the following potential amenities to promote access and connections:

- Bus stops and shelters (ADA accessible) on Burdick and Alcott
- Trail along railroad
- Educational exhibits on the history of paper industry and site cleanup
- Educational programming for youth that engage students in hands on learning and park stewardship

Recreational Reuse Goals *potential.*

Community members identified the following potential recreational amenities:

- Scenic look out and hiking trail
- Mountain bike park with trails and features
- Hockey/skating rink
- Skateboard park
- Climbing wall
- Playground
- Luge run
- Zip line
- Indoor recreation facility

Economic Development Considerations

Community members identified the following considerations to promote economic development:

- Leverage colleges/universities to grow sectors in medicine, pharmaceuticals and food systems.
- Bronson Hospital, WMU Medical School and KVCC collaboration is a model for commercial reuse.
- Consider alternative energy generation (solar, wind, methane gas capture).
- Consider incentives to capture retail development opportunities that typically flow to outside the City to Kalamazoo County.



Reuse Suitability

Elevation Zones

Elevation Zones

Sitewide Reuse Alternative

Floodzone

- Elevations: 780-794 Feet
- Limitations: 100-year Flood Zone
- Access: Trail, greenway, boating

Intermediate Zone

- Elevations: 795 - 809 Feet
- Limitations: Commercial, industrial or recreational uses.
- Access: vehicle, potential rail access.

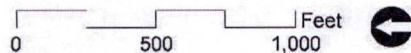
Highland Zone

- Elevations: 810-866 Feet
- Limitations: Elevated capped area with side slopes; development limitations, cap maintenance requirements.
- Access: Potential pedestrian and recreational access.

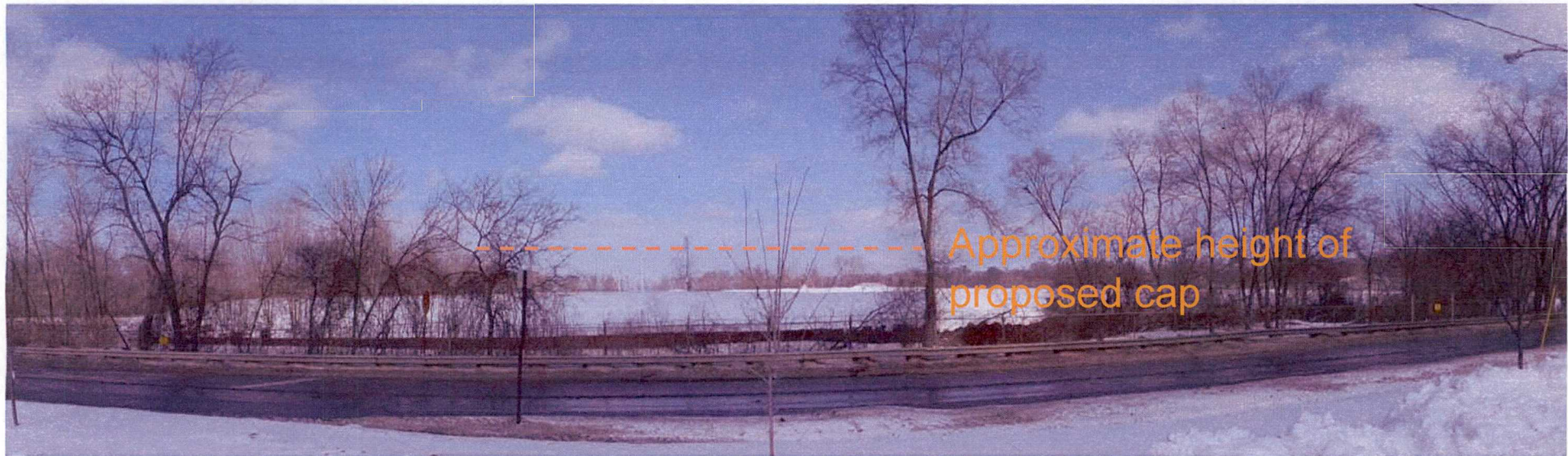
Other Features

- Topography
- + 800' Spot Elevations (feet above sea level)
- Parcels
- Surface Water
- Allied Landfill Site Areas

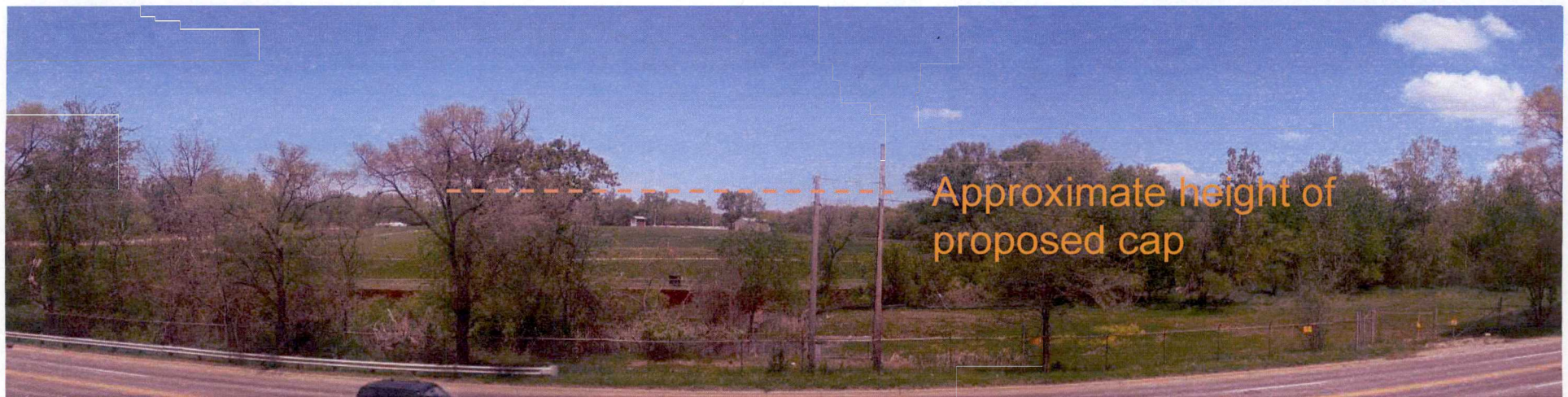
Note: This map is for planning purposes only, all locations and boundaries are approximate.



Current View from Cork Street

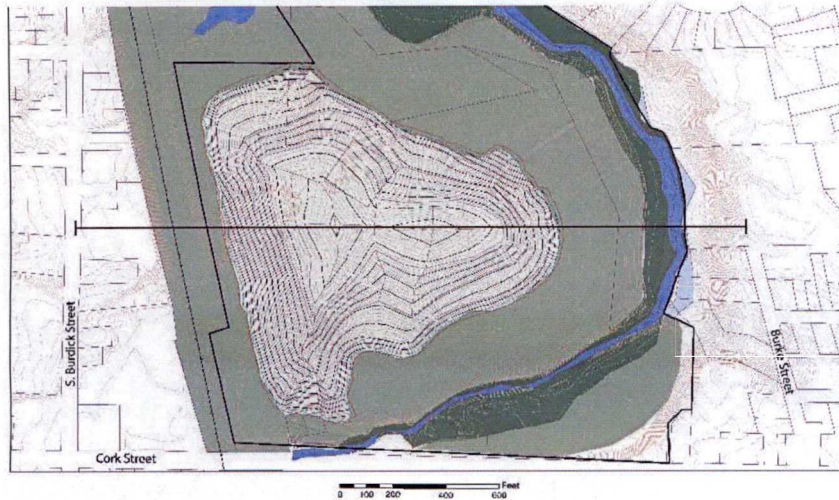


February 2015



April 2009

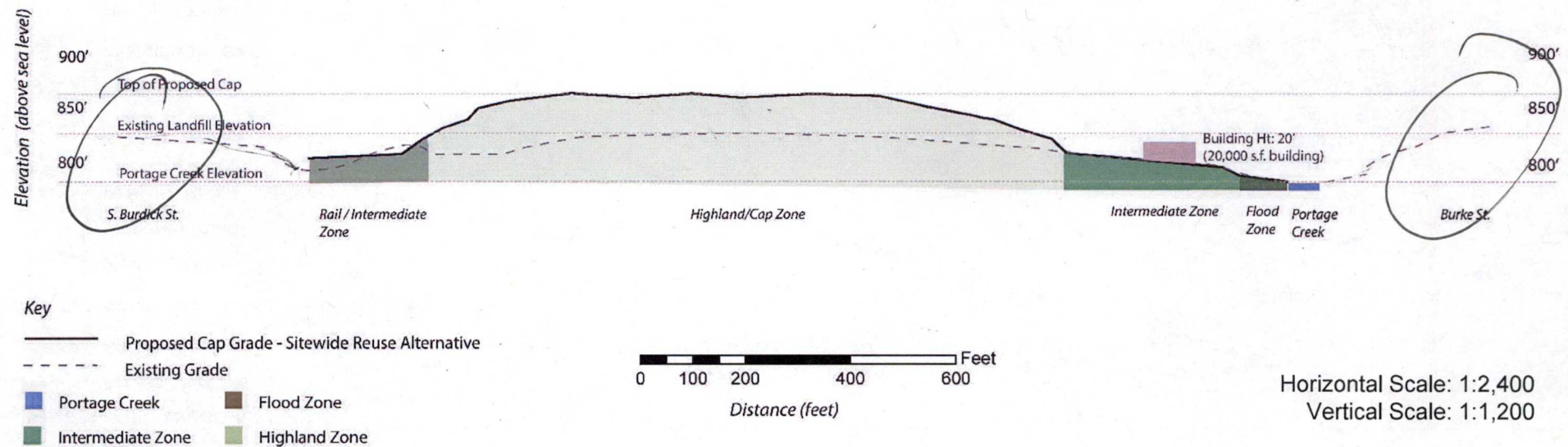
Site Profile (option 1: 1"=100')



Section Diagram







S. Burdick St. to Burke St.

- Proposed cap anticipated at 41' above existing landfill elevation.
- Diagram below shows elevation twice the height relative to distance.






Access and Connections




Access and Connections

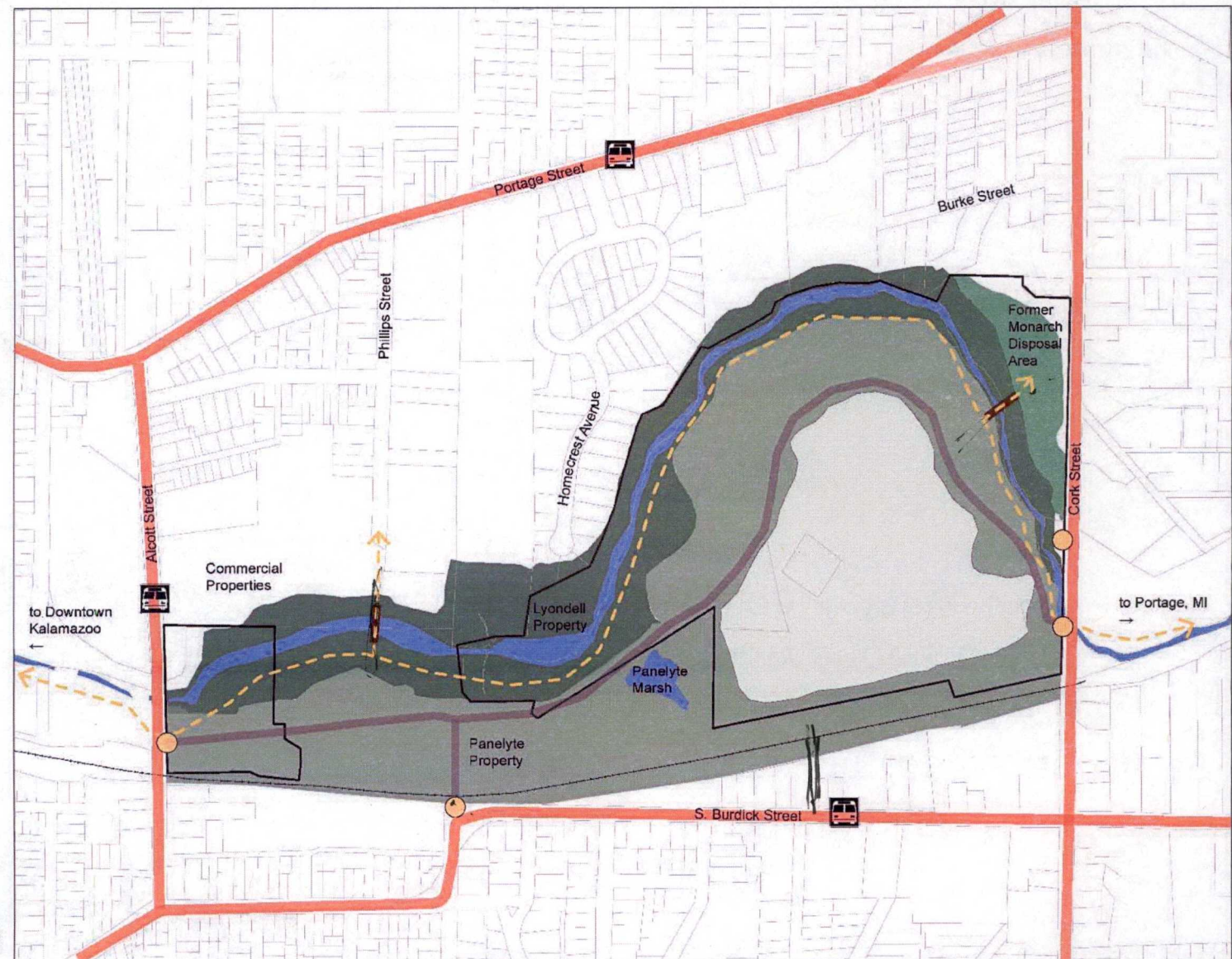
-  Access Point
-  Arterial Street
-  Bus Route
-  Proposed Trail
-  Proposed Road
-  Potential Bridge Location

Topography and Elevation Zones

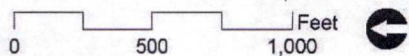
-  Flood Zone
-  Intermediate Zone
-  Highland Zone

Other Features

-  Parcels
-  Surface Water
-  Allied Landfill Site Areas



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Reuse Zones

Reuse Zones

Sitewide Reuse Alternative

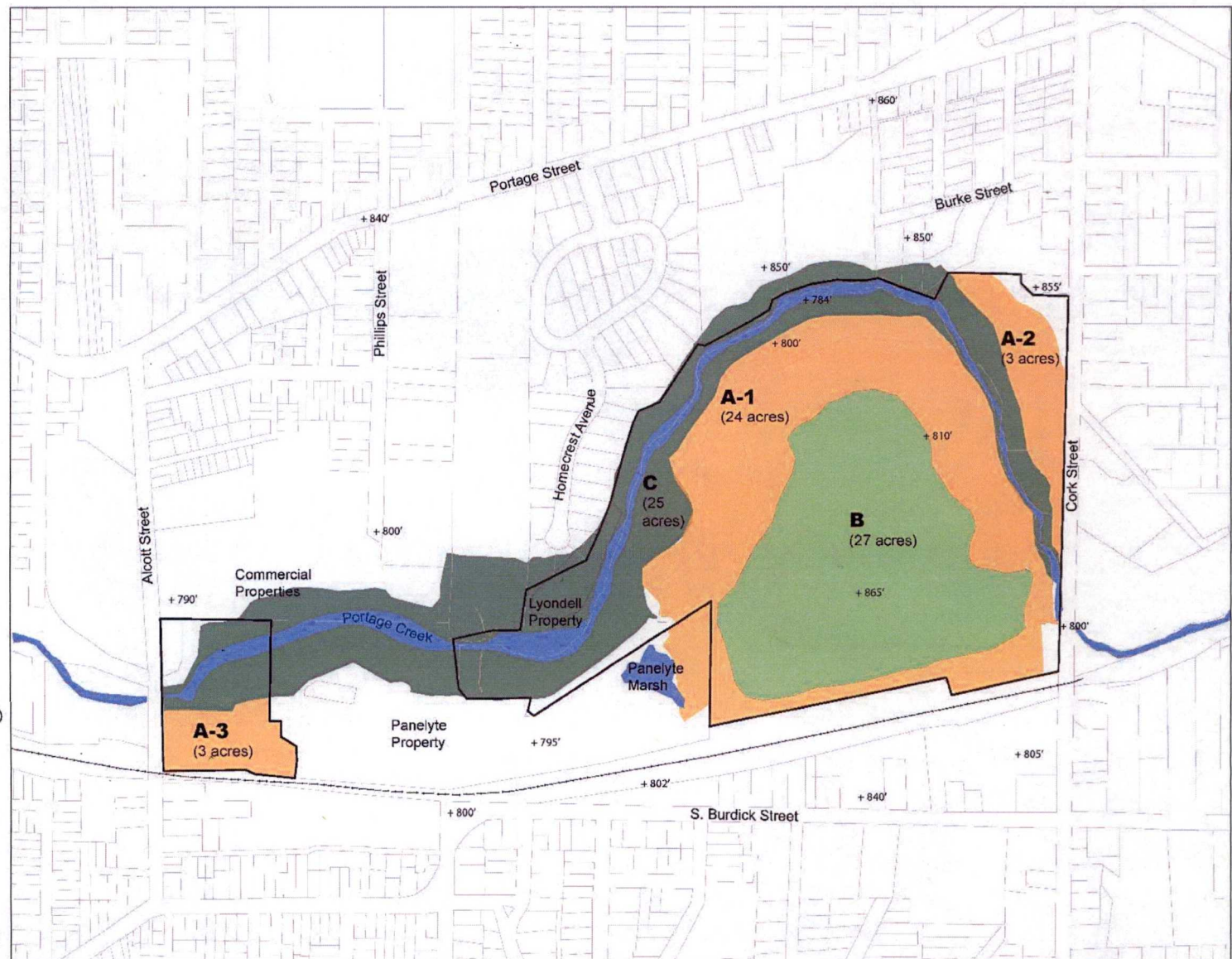
- A Commercial/Industrial/Recreational (30 acres total)**
- Few limitations
 - Contaminant excavation
 - Backfilled and re-graded
 - Institutional controls limit future use to commercial/industrial or recreational uses.
- B Recreation/Open Space (27 acres)**
- Remedial Considerations
 - Consolidation and capping
 - Sloped areas and elevated grade (41 feet above existing grade)
 - Institutional controls prevent disturbance of cap and remedial features.
- C Portage Creek Greenway (25 acres including creek channel)**
- Flood zone limitations
 - Portage Creek 100-Year Flood Plain
 - Previously remediated areas (Bryant Mill Pond Removal Action)
 - Institutional controls limit future use to recreation/open space

Other Features

- Topography
- + 800' Spot Elevations (feet above sea level)
- Parcels
- Surface Water
- Allied Landfill Site Areas

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0 500 1,000 Feet



Reuse Suitability

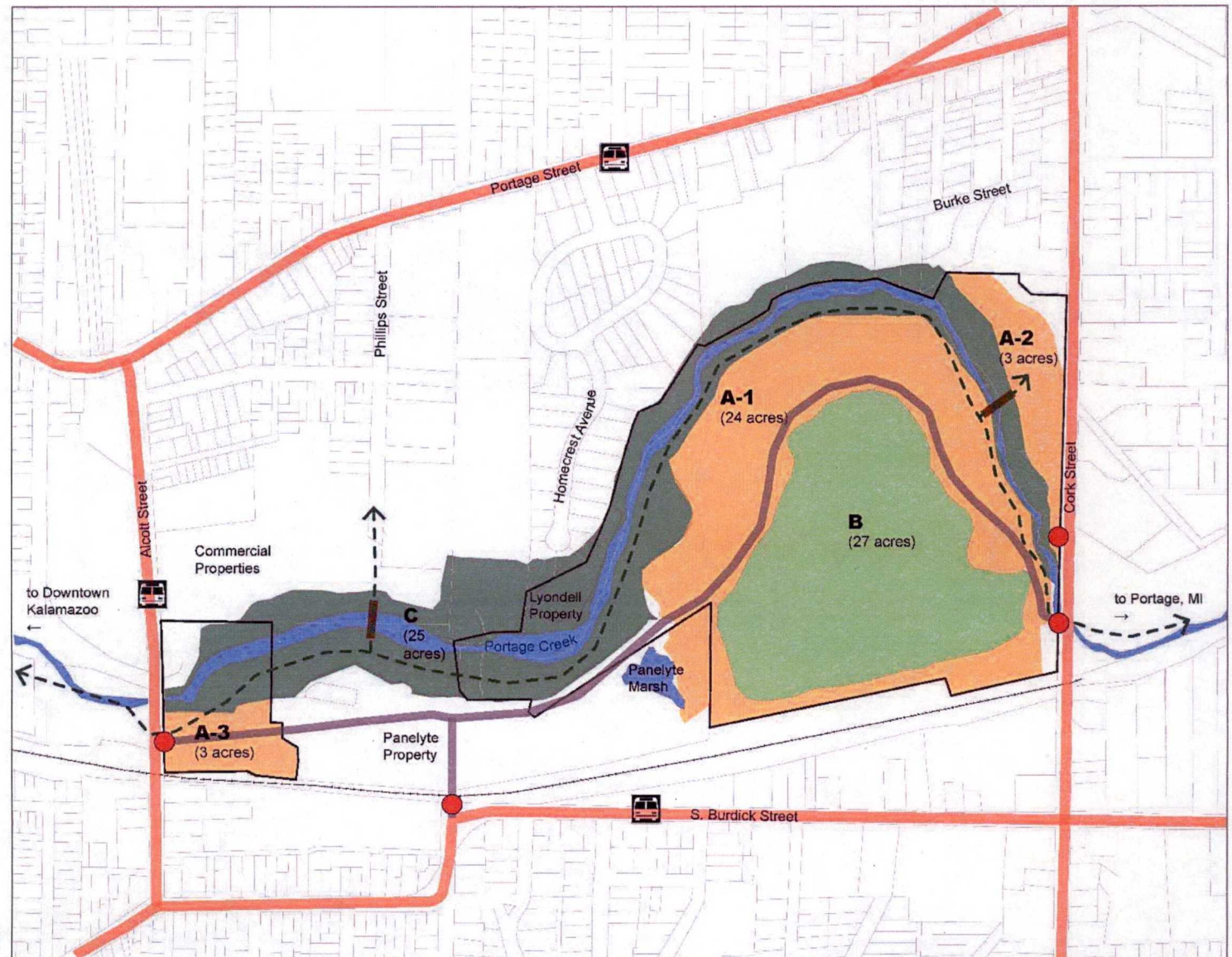
Potentially Suitable Uses

- A Commercial/Industrial/Recreational (30 acres total)**
- Commercial development (medicine, pharmaceuticals and food systems)
 - Alternative energy generation (solar, wind)
 - Commercial retail
 - Indoor recreation facility
 - Skate park
 - Playground
 - Climbing wall
 - Trail along rail line (ADA-accessible)
- B Recreation/Open Space (27 acres)**
- Scenic look out and hiking trail
 - Mountain bike park
 - Luge run
 - Zip Line
 - Alternative energy generation (methane gas capture)
- C Portage Creek Greenway (25 acres including creek channel)**
- Multi-use greenway trail (ADA-accessible)
 - Educational exhibits on the history of paper industry and site cleanup
 - Environmental education and stewardship programming

Other Features

- Access Point
- Arterial Street
- 🚌 Bus Route
- - - Proposed Trail
- Proposed Road
- Potential Bridge Location
- ▭ Parcels
- Surface Water
- ▭ Allied Landfill Site Areas

0 500 1,000 Feet



Reuse Suitability Considerations

Zone	Size	Limitations	Elevation	Access	Potentially Suitable Uses
A. Commercial/Industrial/Recreational	30 acres total	Few Limitations	Intermediate Zone	Vehicular (with bus route access), rail, pedestrian	<ul style="list-style-type: none"> - Hockey/skating rink - Skateboard park - Climbing wall - Playground - Commercial-Office/R&D/Retail - Renewable energy
B. Recreation/Open Space	27 acres	Remedial Limitations	Highland Zone	Pedestrian, bicycle	<ul style="list-style-type: none"> - Scenic look-out - Hiking trail - Mountain bike park - Luge run - Zip line - Renewable energy
C. Portage Creek Greenway	25 acres	Flood Zone Limitations	Flood Zone	Pedestrian, bicycle, canoe/kayak	<ul style="list-style-type: none"> - ADA-accessible greenway trail - Educational exhibits, stewardship programming



Reuse Considerations

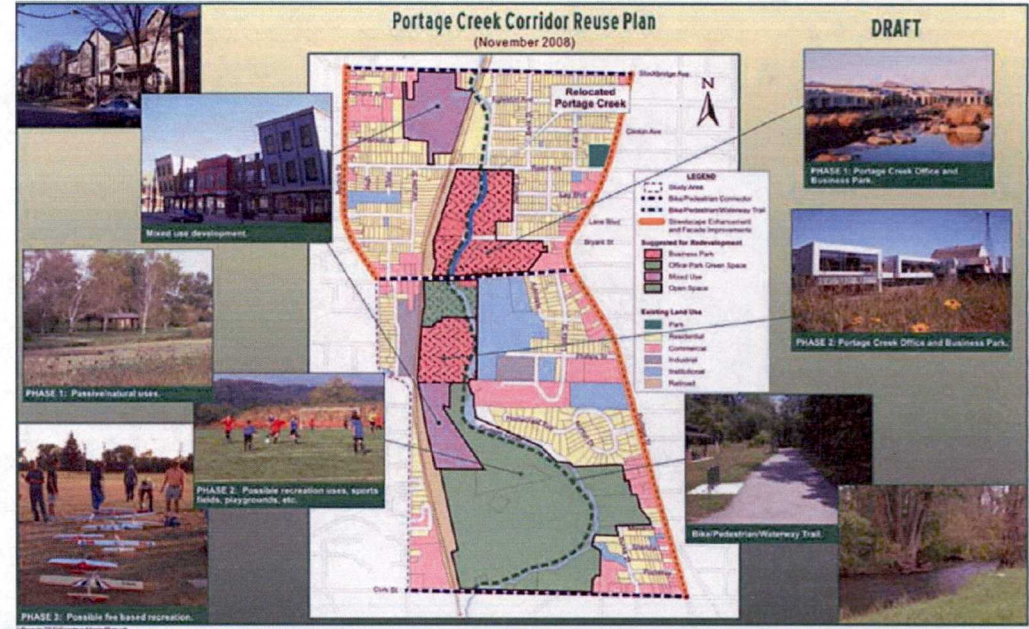
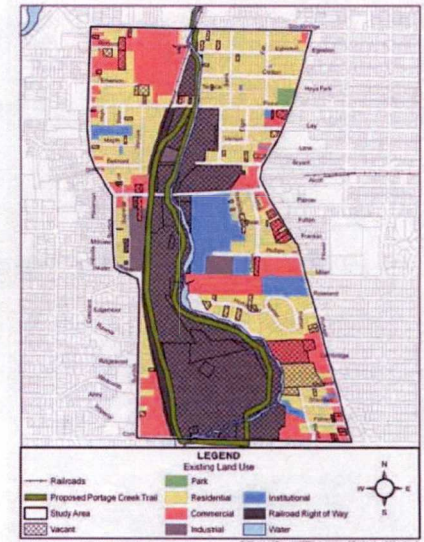
Increase Economic Development Potential

The sitewide reuse alternative:

- Increases economic development potential for the Portage Creek corridor by adding an additional 30 acres for commercial reuse (Zone A).
- Offers potential to compliment existing nearby commercial retail.
- Creates opportunities to leverage emerging clusters in medicine, pharmaceuticals and food systems.



Existing commercial retail on Cork St. (above); Surrounding Land Use Map (right); Portage Creek Corridor Reuse Plan (below)



Expand Recreation and Open Space

The proposed sitewide reuse alternative:

- Increases access to recreation and open space by adding an additional 27 acres of open space (Zone B).
- Potential to accommodate a range of active recreational uses that take advantage of accessible steeper terrain.
- Examples include: sledding hill, gravel walking trails, zipline, playground and skatepark.

